

## CLAIMS:

1. An apparatus for manufacturing a resin-impregnated cured sheet, characterized by comprising conveyance means for conveying a long uncured fiber sheet which is obtained by using short fibers to make paper and which contains uncured resin; and resin curing means for curing the uncured resin of the uncured fiber sheet,

wherein the conveyance means is equipped with at least one rotation belt set comprising a drive roll, a follower roll, and an endless belt which is put one and around the drive roll and follower roll.

2. An apparatus for manufacturing a resin-impregnated cured sheet according to claim 1, further comprising a winding device in which a trimming cutter for trimming both side edges of the resin-impregnated cured sheet, a press roll for retaining a winding face pressure, and a winding shaft are arranged in order along a running path of the resin-impregnated cured sheet.

3. An apparatus for manufacturing a resin-impregnated cured sheet according to claim 1 or 2, wherein the conveyance means is equipped with at least two upper and lower rotation belt sets which are arranged in a paired manner so as to sandwich a conveyance path of the uncured fiber sheet.

4. An apparatus for manufacturing a resin-impregnated cured sheet according to any one of claims 1 to 3, wherein the resin curing means includes a pair of the heating and pressuring rolls which are arranged so as to nip the uncured fiber sheet through

the endless belt.

5. An apparatus for manufacturing a resin-impregnated cured sheet according to any one of claims 1 to 3, wherein the resin curing means is provided with a heating liquid pressure device which is arranged so as to nip the uncured fiber sheet through the endless belt.

6. An apparatus for manufacturing a resin-impregnated cured sheet according to any one of claims 1 to 5, wherein the resin curing means is equipped with at least a preheating section and a heating and pressuring section.

7. A method for manufacturing a resin-impregnated cured sheet using the apparatus for manufacturing the resin-impregnated cured sheet according to any one of claims 1 to 5, characterized by including steps of continuously producing a long cured fiber sheet by curing the uncured resin of the long uncured fiber sheet and winding up the long cured fiber sheet.

8. A method for manufacturing a resin-impregnated cured sheet according to claim 7, wherein the fiber-made sheet which is obtained by using short fibers to make paper contains a carbon short fiber and an organic polymer-based binder.

9. An apparatus for manufacturing a carbonaceous material sheet by carbonizing a resin-impregnated cured sheet produced by curing a long uncured fiber sheet which is obtained by using short fibers to make paper and which contains uncured resin, the apparatus being characterized by comprising a carbonization treatment chamber for carbonizing the resin-impregnated cured sheet while continuously transferring the resin-impregnated

cured sheet in a horizontal direction, and guide rolls which are arranged in the carbonization treatment chamber.

10. An apparatus for manufacturing a carbonaceous material sheet according to claim 9, further comprising a winding device in which a trimming cutter for trimming both side edges of the carbonaceous material sheet, a press roll for retaining a winding face pressure, and a winding shaft are arranged in order along a running path of the carbonaceous material sheet.

11. A method for manufacturing a carbonaceous material sheet, characterized by including steps of: continuously producing a long resin-impregnated cured sheet by curing uncured resin of a long uncured fiber sheet by using an apparatus for manufacturing a resin-impregnated cured sheet, comprising conveyance means for conveying a long uncured fiber sheet which is obtained by using short fibers to make paper and which contains uncured resin; and resin curing means for curing the uncured resin of the uncured fiber sheet wherein the conveyance means is equipped with at least one rotation belt set comprising a drive roll, a follower roll, and an endless belt which is put on and around the drive roll and the follower roll; and continuously producing a carbonaceous material sheet by carbonizing the long resin-impregnated cured sheet by using the carbonization apparatus according to claim 10, and then winding up the carbonaceous material sheet.

12. A method for manufacturing a carbonaceous material sheet according to claim 11, wherein the fiber-made sheet which is obtained by using short fibers to make paper contains a carbon

short fiber and an organic polymer-based binder.

13. A method for manufacturing a carbonaceous material sheet according to claim 11 or 12, wherein an average diameter of the carbon short fiber is less than 5  $\mu\text{m}$ .

14. A method for manufacturing a carbonaceous material sheet according to any one of claims 11 to 13, wherein a carbonization yield of the organic polymer-based binder is 40% by weight or less.

15. A method for manufacturing a carbonaceous material sheet according to any one of claims 11 to 14, wherein the resin-impregnated cured sheet is produced by preliminarily heating the fiber sheet which is impregnated with the uncured resin and then heating and pressuring it.

16. A method for manufacturing a carbonaceous material sheet according to claim 15, wherein a temperature at the heating and pressurizing is higher than a preheating temperature by 50°C or more.